

## Update to Quarantine Guidance with Consideration of Close Contacts in K-12 School Settings

Michigan.gov/Coronavirus

May 21, 2021

Case investigation, contact tracing and quarantine are crucial tools in stopping the spread of the SARS-CoV-2 virus to household and community contacts, particularly protecting those contacts at most risk of severe outcomes from a COVID-19 infection.

### Notification of close contacts

The practice of contact tracing provides notification of possible exposure to people who were close contacts to exposed individuals. This information is important for contacts and their families to assess risk within their own context, including whether other members of the close contact's household are immunocompromised or have other vulnerabilities.

The definition of close contact was developed by CDC based on an understanding of aerosol and droplet transmission of the virus. The definition is independent of the steps taken for quarantine.

**Close Contact:** Someone who has been within [6 feet of an infected person](#) (laboratory-confirmed or a [clinically compatible illness](#)) for a cumulative total of 15 minutes or more over a 24-hour period (*for example, three individual five-minute exposures for a total of 15 minutes in one day*). An infected person can spread SARS-CoV-2 starting from two days before they have any symptoms (or, for asymptomatic patients, two days before the positive specimen collection date), until they meet criteria for [discontinuing home isolation](#).

Local health departments and any entities designated to conduct contact tracing should continue to provide exposure notification and education to individuals who fit the definition of a close contact of a COVID-19 case, even if the contact occurred between three and six feet while masked.

### Quarantine of close contacts

Contact tracing also identifies for public health which individuals may need to undertake quarantine or other restrictions on activity to protect against further transmission if the exposed individual becomes infected or ill. The quarantine guidance also informs exposed individuals how to protect others during the period they may develop infection. Close contacts who develop

symptoms of COVID-19 or who test positive for COVID-19 during this quarantine period should self-isolate and follow isolation recommendations.

On April 5, 2021, the Michigan Department of Health and Human Services (MDHHS) modified quarantine guidance in response to the dramatic increase in cases that included a preponderance of B.1.1.7 variant infections. Consideration was given not only to the increase in cases that were being identified but also to the increased transmissibility of the variant infections. In the context of increased transmission associated with variant infection, exposures that are not addressed aggressively can be associated with greater transmission than the “normal” or wild-type virus. Persons who are not in full quarantine at the time of presentation with COVID-19 infection may contribute to higher transmission rates and even super spreader events. In short, the impact of these infections in our communities may resonate louder and longer than standard infections. Following CDC guidance, MDHHS recommended a 14-day quarantine for close contacts of COVID-19 cases across Michigan. On April 12, 2021 that guidance was clarified to assure that there was local health department discretion to remain at a 10-day quarantine and that this time period could be applied within the Traceforce system if proper notification is given.

MDHHS continues to monitor case incidence to inform our guidance. While most of Michigan’s sequenced cases continue to present as B.1.1.7 variant infections, over the past three weeks the case load has declined substantially.

### **Recommendations for General Population**

MDHHS, and the Centers for Disease Control and Prevention, continue to endorse quarantine for 14 days but also recognize that any quarantine period shorter than fourteen days balances reduced burden against a small possibility of spreading the virus. **Therefore, for contacts of cases, MDHHS is supporting local public health discretion to opt for a 10-day alternative to the 14-day quarantine** when close contacts should continue to monitor for symptoms (see more detail below).

There are two groups of people who are exempted from quarantine following exposure to someone who is COVID-19 positive:

1. Individuals who have been fully vaccinated against COVID-19 (i.e., over two weeks have passed from receipt of the second dose in a two-dose vaccine series, or from receipt of a single-dose vaccine) if they have remained asymptomatic since their last exposure to COVID-19. (Immunocompromised people need to consult their healthcare provider about these recommendations, even if fully vaccinated.)

2. Individuals previously diagnosed with COVID-19 are no longer required to quarantine if they: (1) have recovered from COVID-19 within the previous three months, measured from the date of symptom onset (or, if asymptomatic, the date of the first positive test); and (2) are currently asymptomatic.

Quarantine is used to keep someone who might have been exposed to COVID-19 away from others. Quarantine helps prevent spread of disease that can occur before a person knows they are sick or if they are infected with the virus without feeling symptoms. People in quarantine should stay home, separate themselves from others, monitor their health, and follow directions around daily reporting of health status to public health.

Asymptomatic individuals may be released from quarantine at ten days and return to limited activities following ten days of quarantine, provided the following are maintained for a cautionary period of days 11-14 of the 14-day quarantine period.

1. The close contact continues to self-monitor for symptoms.
  - a. Traceforce will call close contacts to monitor for development of symptoms for the duration of their quarantine period. Contacts are encouraged to self-monitor and call their local health department if they develop symptoms on days 11-14.
2. The close contact continues adhering to social distancing, face mask requirements, and avoidance of large gatherings.

Any modification to the quarantine schedule must be considered in terms of the risk of missed cases and the ability of the local health department to manage logistics. **At this time, MDHHS is not recommending any quarantine strategy that includes less than ten days of quarantine in the general population, even if it includes a testing component.** The reduced schedule increases the number of possibly missed infections and, with B 1.1.7 having higher transmissibility, the impact of those missed infections is higher than it was when CDC developed this optional method in November of 2020. There is no accepted mechanism to validate and document testing results consistently across the state.

If a local health department chooses to make use of the seven-day diagnostic test out option described in CDC guidance, that information will need to be managed through direct contact with the individual and manual review of negative test results by the local health department. A serologic test is not useful in this mechanism as its utility for this purpose has not been established and is not recommended by CDC at this time. For local health departments that utilize Traceforce, contacts must be manually removed from tracing based on local health department

review of negative test results. If local health departments do not remove contacts, they will continue to be contacted by the Traceforce team.

### **Recommendations for K-12 students who are only close contacts of a classmate:**

Education has an incredible value to students, families, and society. According to the CDC, in-person instruction should be prioritized over extracurricular activities, including sports and school events, to minimize risk of transmission in schools and protect in-person learning.<sup>1</sup>

For this reason, MDHHS is providing guidance on the circumstances where students have only been exposed in a classroom do not have to undertake the 14-day quarantine period or the 10-day alternative to the 14-day quarantine. The school must have strong mitigation measures in place including universal masking and social distancing. The use of this approach should be considered by the local health department and the school district, allowing for consideration of school-related outbreaks and levels of community transmission. If this recommendation is chosen, its use should be communicated to the school community, making clear that the quarantine is not being employed, while describing the mitigation measures being taken by the school to reduce risk in the classroom.

**If a student's exposure occurred only in the classroom, while both index case and close contact were masked and sitting at least three feet but less than six feet apart, the local health department and school district can consider following the actions in place of quarantine.** (Please see appendix for an algorithm to aid in identify students who fit this criteria.)

1. Schools would still need to notify parents/guardians of the student meeting the close contact definition above.
2. Schools will continue to report close contacts to local public health.
3. Parents/guardians would continue to monitor the student for symptoms.
4. Public health would continue to treat this student as a close contact.
  - a. The LHD must go into Traceforce daily before 9 am and assign these contacts to local health department staff in Traceforce so they are not contacted by

<sup>1</sup> Sources: CDC Operating Schools During COVID-19: <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/operation-strategy.html>. Also from CDC Transmission of SARS-CoV-2 in K-12 schools: [https://www.cdc.gov/coronavirus/2019-ncov/science/briefs/transmission\\_k\\_12\\_schools.html?CDC\\_AA\\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fmore%2Fscience-and-research%2Ftransmission\\_k\\_12\\_schools.html](https://www.cdc.gov/coronavirus/2019-ncov/science/briefs/transmission_k_12_schools.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fmore%2Fscience-and-research%2Ftransmission_k_12_schools.html) : "Many sports or other types of group extracurricular activities can increase the risk of SARS-CoV-2 transmission for participants, coaches, and spectators. Participation in extracurricular activities and sports may also increase the risk of SARS-CoV-2 transmission among other students, teachers, and staff... For these reasons, strategies to control COVID-19 transmission in schools should take the role of sports and other extracurricular activities into account, as well as differences in transmission dynamics for these activities compared with in-person instruction."

centralized tracing. School and local health departments should encourage these parents/guardians to enroll in daily mobile symptom monitoring. Local health departments who use centralized tracing support must assess and call these close contacts directly to provide proper guidance based on school mitigation procedures and knowledge of exposures. Local health departments will not be able to upload these class lists in the OMS Realtime outbreak any further. They must be manually Local health departments wishing these types of close contacts to remain in the classroom should request a technical assistance session with the Traceforce team by emailing the MDHHS Tracing Team at email MDHHS-Traceforceescalation@michigan.gov

**5. The student may continue to attend school.**

6. The student should continue to follow social distancing, face mask requirements, and avoidance of large gatherings.

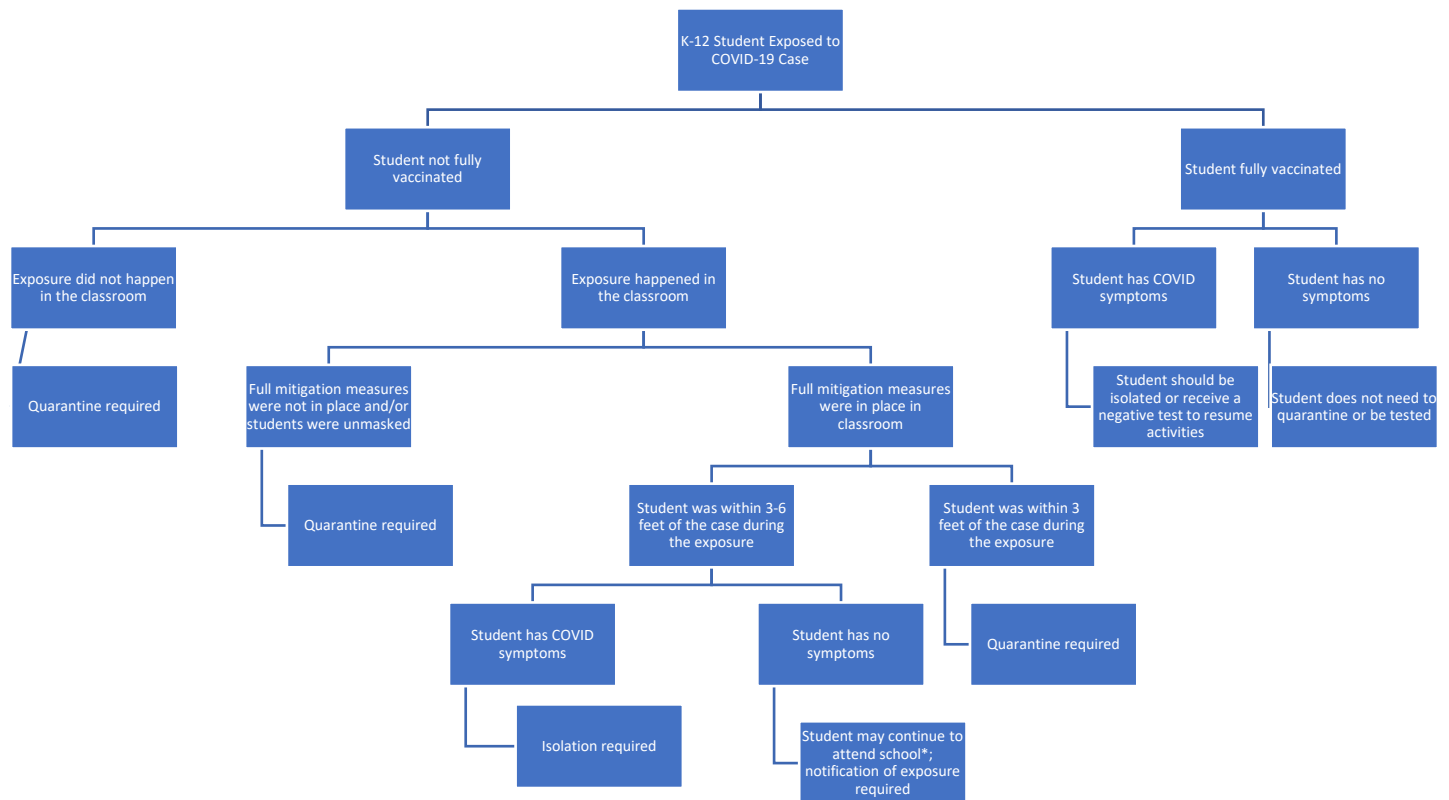
The purpose of this guidance is to balance in person learning by a close contact with the risk of potentially exposing others to COVID-19. MDHHS recommends educating parents/guardians that, even though the student can attend school, they are still a close contact with an exposure to COVID-19. The family should consider this before having the child visit family members and friends who may be at risk of severe outcomes for COVID-19 infection and limit the child's social activities outside of school for at least 10 days if asymptomatic. The student could be tested with a home rapid test 2 times a week during this period to identify asymptomatic infection as early as possible to reduce the chance of household transmission.

Students who do not meet this exposure status described above would enter quarantine and would not attend in-person school; for example, students who are exposed through playing contact sports would enter quarantine. Students sitting within three feet of a student who has COVID-19 would enter quarantine. If a local health department or school is unable to determine that the exposure only occurred in the classroom, the student would enter quarantine. If an additional case develops in the classroom, if a classroom or pod/cohort outbreak is identified, or if local health has identified ongoing transmission within the school building, the local health department may determine that quarantine should be put into place for all contacts, and possibly additional persons in a classroom, pod or cohort, when acting out of an abundance of caution to prevent further spread.

Students who test positive for COVID-19 must isolate per MDHHS and CDC guidelines and not participate in school via in person learning.

Implications for Traceforce system: To handle this change in the Traceforce system, all cases that meet these criteria will not be traced or contacted by centralized Traceforce staff. In order to prevent these students from being contacted by centralized staffing local health departments needs to assign these students to your local health department staff before 9 am each day in Traceforce to prevent the students from being called by centralized tracers. Local health departments must contact minors who are close contacts and assess their quarantine date based on exposure and enroll them in daily symptom monitoring. Job aids on how to disposition cases in Traceforce, how to create school lists and conduct tracing in Traceforce are located here at [www.michigan.gov/cdinfo](http://www.michigan.gov/cdinfo).

Algorithm for assessing quarantine options based on K-12 student exposure.



\*Student can attend school but must adhere to masking, social distancing, and avoidance of large gatherings guidelines strictly for 14 days post-exposure. Diligent symptom monitoring is also required. If any symptoms develop, student must stay home and can be tested for COVID.

## References

### Close contact and contact tracing:

Operational Strategy for K-12 Schools through Phased Prevention - Updated Apr. 23, 2021

- <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/operation-strategy.html>
- The definition of a close contact is someone who was within six feet of a person diagnosed with COVID-19 for a total of 15 minutes or more over a 24-hour period. The definition of a close contact applies regardless of whether either person was wearing a mask.
- For schools that use less than six feet between students in classrooms, **the definition of close contacts should not change**. Students sitting less than 6 feet next to another student or person diagnosed with COVID-19 for a total of 15 minutes or more should quarantine at home and be referred for testing.
- Close contacts, identified through contact tracing, should quarantine unless they are fully vaccinated, or have tested positive in the last three months, and do not have any symptoms.
- Rigorous implementation of prevention strategies is essential to control the spread of variants of SARS-CoV-2
- Regardless of the test result, close contacts should quarantine for 14 days. Based on local circumstances and resources, options to shorten quarantine provide acceptable alternatives of a 10-day quarantine or a 7-day quarantine combined with testing.

### Reducing quarantine

Science Brief: Options to Reduce Quarantine for Contacts of Persons with SARS-CoV-2 Infection Using Symptom Monitoring and Diagnostic Testing

- <https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/scientific-brief-options-to-reduce-quarantine.html>
- Quarantine can end after Day 10 without testing and if no symptoms have been reported during daily monitoring.
  - o With this strategy, residual post-quarantine transmission risk is estimated to be about 1% with an upper limit of about 10%.
- Quarantine can end after Day 7 with negative diagnostic specimen test.
  - o With this strategy, the residual post-quarantine transmission risk is estimated to be about 5% with an upper limit of about 12%.
- Table. Estimated residual post-quarantine transmission risk with and without a negative diagnostic test of a specimen collected within 48 hours prior to discontinuation of quarantine on the indicated day for a person monitored daily for symptoms and who has

remained asymptomatic until quarantine is discontinued as well as through Day 14. Published data were applied to model residual post-quarantine transmission risk using RT-PCR; for antigen testing, a diagnostic sensitivity of 70% was applied.

Estimated residual post-quarantine transmission risk

Planned day after which quarantine is completed and can be discontinued	Residual post-quarantine transmission risk (%) with and without diagnostic testing of a specimen within 48 hours before time of planned discontinuation of quarantine					
	No testing		RT-PCR testing		Antigen testing	
	Median	Range	Median	Range	Median	Range
7	10.7	10.3-22.1	4.0	2.3-8.6	5.5	3.1-11.9
10	1.4	0.1-10.6	0.3	0.0-2.4	1.1	0.1-9.5
14	0.1	0.0-3.0	0.0	0.0-1.2	0.1	0.0-2.9

### Outbreaks in Schools

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Otte Im Kampe E, Lehfeld AS, Buda S, Buchholz U, Haas W. Surveillance of COVID-19 school outbreaks, Germany, March to August 2020. Euro Surveill. 2020;25(38):2001645. doi:10.2807/1560-7917.ES.2020.25.38.2001645

### Limiting spread in schools with comprehensive prevention strategies

Honein MA, Barrios LC, Brooks JT. Data and Policy to Guide Opening Schools Safely to Limit the Spread of SARS-CoV-2 Infection. JAMA. 2021;10.1001/jama.2021.0374. Published online ahead of print 2021 January 26. doi:10.1001/jama.2021.0374

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Kriemler S, Ulyte A, Ammann P, et al. Surveillance of acute SARS-CoV-2 infections in school children and point-prevalence during a time of high community transmission in Switzerland. Preprint. MedRxiv. 2020; Posted 2020 December 26. doi:10.1101/2020.12.24.20248558

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### Physical Distancing in Schools

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Wong T-w, Lee C-K, Tam W, et al. Cluster of SARS among Medical Students Exposed to Single Patient, Hong Kong. Emerg Infect Dis. 2004;10(2):269.

- Low transmission in school environments with less than 6 feet distancing within cohorts and 14-day quarantine

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